Deluxe FreezeAlarm Model FA-D2

Thank you for purchasing our Deluxe FreezeAlarm, model FA-D2. If you have any questions or concerns about this product, feel free to contact us. Our phone number, web sites and email addresses are listed on page two.

GENERAL DESCRIPTION AND FEATURES:

The Deluxe FreezeAlarm is a remote monitoring device that can automatically call up to three phone numbers when the temperature inside any space gets out of range, if the power fails or if the back-up battery requires replacing. The FreezeAlarm uses a series of menu options that are accessible by pressing the buttons on your Touch-Tone phone. All menu prompts and alarm messages are in English. In addition to calling you if an emergency condition exists at your monitored location, the Deluxe FreezeAlarm also offers the following features:

- "Quick Status Check" allows you to remotely check the current temperature, power status and battery status from any phone in the world – all within a 15 second phone call.
- Remotely turn up the heat in your vacation home or cabin by switching between a thermostat set at a lower temperature to one set at a higher temperature. This feature does require some integration with your existing heating system.
- Monitor for the presence of water leaks and floods by adding our WaterAlarm (WA-20) water sensors. They provide additional peace of mind from leaking pipes and fixtures, burst washing machine hoses, leaking water heaters or overflowing sumps. The WaterAlarm triggers the Deluxe FreezeAlarm to call your three programmed numbers and warn you of a water emergency.
- Home Security can be added through the addition of our MiniAlarm Motion Sensor (MA-S01). An audible alarm will warn intruders to stay away and trigger the Deluxe FreezeAlarm to call and warn you of an intrusion at your property.
- A normally open or closed auxiliary alarm contact allows you to monitor for any type of alarm sensor that can either close or open a dry contact.
- Any or all of the three numbers can be to a numeric pager.

APPLICATIONS:

- Second home owners or "Snowbirds" who need to monitor two different homes.
- Cabin and Vacation Property Owners can monitor their home and pre-heat it by phone.
- Monitor a refrigerator or freezer from getting too warm since the Deluxe model has both a high and low temperature alarm setpoint.
- Computer Rooms can be monitored if air conditioning fails
- Elderly residents or pets can be rescued from homes that get too hot.
- Monitor greenhouses, health care drugs, vaccines and supplies.
- Monitor equipment, boilers and any machinery that has the ability to close an alarm contact.

If, after reading this manual, you need additional help installing or using your FreezeAlarm, contact our technical support department at 952-361-4101, Monday through Friday, 8am to 5pm, Central Time.

For easy future reference during technical support and service, it is recommended that you write your purchase date and the "date code" of the unit in the spaces below. The "date code" can be found on the bottom instruction label on the FreezeAlarm unit itself. You will also need a four digit security code. This is used to prevent unauthorized remote access to your FreezeAlarm. The factory default security code is 9999. You may keep this or change it to your unique code. Your security code must contain four numeric digits.

Purchase Date:_____

Date Code: _____

Security Code: _____

Technical Support: Monday-Friday, 8am to 5pm, Central Time
Phone: 952-361-4101
Fax: 952-361-9420
Email: techsupport@controlproductsinc.com
Web: www.controlproductsonline.com

Every effort has been made to ensure the information in this user manual is complete, accurate and up-to-date. Control Products, Inc. assumes no responsibility for results of errors in this manual nor can it guarantee that changes in equipment made by other manufacturers and referred to in this manual will not affect the operation or intended use of the FreezeAlarm.

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1.0 INITIAL SET-UP:

BEFORE YOU PROCEED - Read the Following

Warranty Statement:

Please read the entire warranty statement on page 31 of this manual.

Minimum Installation:

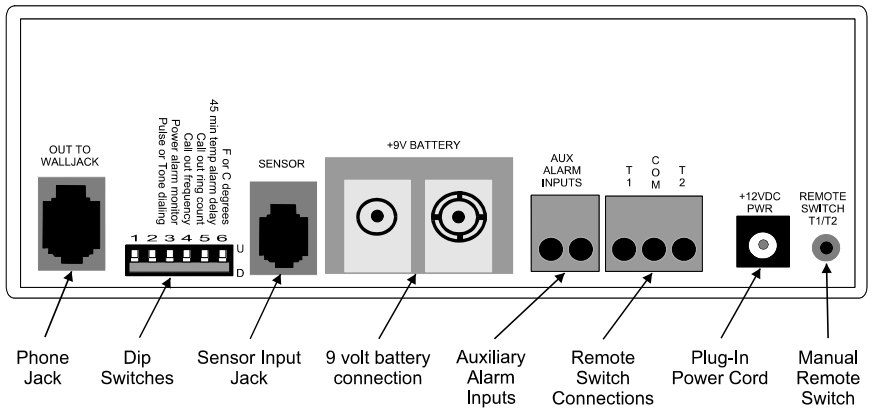
- You should program at least one (1) telephone number to call if there is a temperature, power or battery emergency. The unit will operate without any telephone numbers programmed and you will be able to remotely access the unit to check current status information at the remote location, but without any call-to telephone numbers programmed, you will not receive alarm calls from your FreezeAlarm.
- You must use a back-up battery. A 9V Lithium Battery is highly recommended as a backup battery. This battery is not included with the FreezeAlarm, but is available at most hardware stores or directly from Control Products. Other back-up battery options are discussed in the Appendix.
- **IT IS CRITICAL THAT YOU TEST YOUR FREEZEALARM to make sure the unit calls out during an alarm condition. Follow the test procedure on Page 18.**

1.1 Operating Environment:

The Deluxe FreezeAlarm should operate in a dry, clean area that is near an AC power outlet and a telephone wall-jack. The FreezeAlarm is designed to operate in temperatures from 20° to 140°F (-7° to 60°C). You should not install the FreezeAlarm in areas where there is strong electrostatic, electromagnetic or radioactive fields. Do not install the FreezeAlarm in an area with high humidity, chemical fumes or corrosive vapors. *Never install or connect your FreezeAlarm during a lightning storm!*

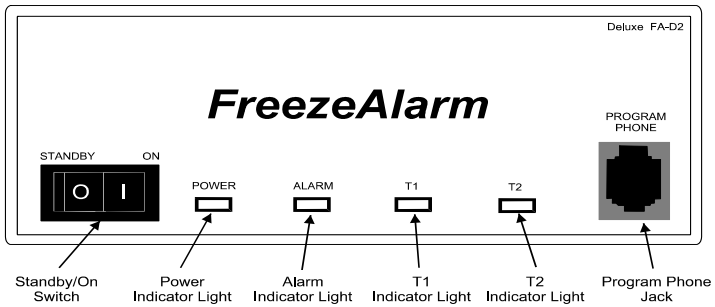
1.2 Knowing your way around your FreezeAlarm:

Back of the FA-D2



Phone Jack	Plug in the supplied telephone cord here. The other end plugs into your telephone wall jack (or through a surge suppressor that has the ability to protect the phone line). See the "connections" section later in the manual for more details.
Dip Switches	There are six dip switches that are used to select various features and functions of your FreezeAlarm. Note that the UP position of the switch is towards the top of the FreezeAlarm's case and DOWN is towards the bottom.
Sensor Input Jack	Use this to plug in the temperature sensor. This jack is a slightly smaller than a normal phone jack. This is done to prevent accidental input of the phone line into this jack which could cause harm to the FreezeAlarm.
9 Volt Battery Connection	This is where you will plug in your 9 volt lithium battery.
Auxiliary Alarm Inputs	The Auxiliary Alarm Input allows you to monitor any additional alarm device or contact closure or contact opening. This is where you could hook up our WaterAlarm™ or MiniAlarm Motion Sensor™.
Remote Switch Connections	These are the connections for the Deluxe FreezeAlarm's Remote Switch Relay.
Plug In Power Cord Connection	This is where you will plug in the power cord transformer that is included with your FreezeAlarm.
Manual Remote Switch, T1/T2	By pressing and holding this switch, you can manually switch between the T1 and T2 settings for the Remote Switch.

Front of the FA-D2



Standby/On Switch	Toggle switch for either STANDBY mode or ON for normal operation mode.
Power Indicator Light	This light is on if the plug-in transformer is plugged in and there is power to the unit. It is not on if the unit is operating on battery power only.
Alarm Indicator Light	This light will FLASH if the unit is in the STANDBY mode. During normal operation with no alarms present, this light will not be on. This light will remain ON and not flash if the unit is in ALARM mode, meaning one of the alarm conditions exists or the alarm call-out has not been canceled.
T1 and T2 Indicator Lights	These indicate the position that the remote switch is in. They can be ignored unless you are using the T1/T2 Remote Switch to either turn up or down the temperature in your monitored location or to turn on or off some other device by telephone.
Program Phone Jack	Plug in a phone here to either locally program your FreezeAlarm or to locally check status or cancel alarm call-outs. ***For normal operation, you will not leave a phone plugged into this jack.***

1.3 What you need before you start:

Before proceeding, make sure you have the following ready:

1. 9 volt Lithium battery for back-up power.
2. A high quality surge suppressor that protects the power line as well as the telephone connections. These are available from all hardware stores, department stores and directly from Control Products.
3. Up to three phone numbers that the FreezeAlarm will automatically call during a temperature, power or battery emergency. You may program only one number or program the same telephone number in more than one of the three positions. These phone numbers are referred to as call-to telephone numbers throughout this manual.
4. Access to a single line telephone jack. An existing single telephone line in a home or business will work fine, and the FreezeAlarm will not interfere with the use of your telephone line in any way. The FreezeAlarm will operate with all standard telephone systems that accept either pulse or tone dialing. Certain private telephone systems and PBX or digital telephone systems may not work with the FreezeAlarm. In those cases, a dedicated, single telephone line will be required. Consult the supplier of your phone system if you

encounter problems or have questions. The FreezeAlarm cannot be used on a party line or a pay telephone line. **It is extremely important that you test dial out to all your call-to telephone numbers.**

5. You will need a standard telephone to program your FreezeAlarm using the front Programming Phone jack. A cordless phone should work, but if you encounter problems, locate a wired phone or program your FreezeAlarm remotely by dialing into it using a cell phone or a phone from another location. You only need this phone to program the FreezeAlarm locally. After programming is completed, this phone is unplugged from the FreezeAlarm and is not needed for the FreezeAlarm to operate.
6. If you wish to use one telephone jack for both the FreezeAlarm and a regular telephone, you will also need to purchase a dual telephone jack line splitter. This will turn a single telephone jack on your wall into two separate telephone jacks to plug in both the FreezeAlarm and a regular single line telephone. These are available from any hardware or discount department store or directly from Control Products.

1.4 Use of a DSL or other Digital Phone Services:

If you have a DSL phone line or a phone line through your cable company, you should install the appropriate filters on the phone line. Please note that the FreezeAlarm is designed to work and is certified by the FCC to operate on a standard telephone line provided by your local telephone company. A DSL, Cable or Digital phone service may work. If you have questions or problems using one of these types of phone services, contact your phone service provider.

Important: During power failures, many alternative phone services such as DSL and Cable provided phone service DO NOT WORK. These phone services require that power be on in the premises for the phones to operate. The FreezeAlarm will NOT be able to call out if the power is out when utilizing these phone services. If you have a standard POTS telephone line, power is supplied to this line by the telephone company and is usually not affected if power is out at the monitored location.

1.5 Dip Switches and Their Functions:

1. **DO NOT plug in any components or battery until directed to do so in the manual.**
2. Make sure the toggle switch on the front of the FreezeAlarm is on the STANDBY position for programming. The ALARM light on the front of the unit will flash when in STANDBY mode.
3. Select the dip switch options per the **Dip Switch Menu** found below.
4. Ignore the ON or OFF labels on the dip switches themselves. Use only the following table for proper explanation of each dip switch setting. UP means the switch should be pointing towards the top of the FreezeAlarm case and DOWN means the switch should be pointed towards the bottom of the case. All the switches should come from the factory in the DOWN position.

Dip Switch Menu

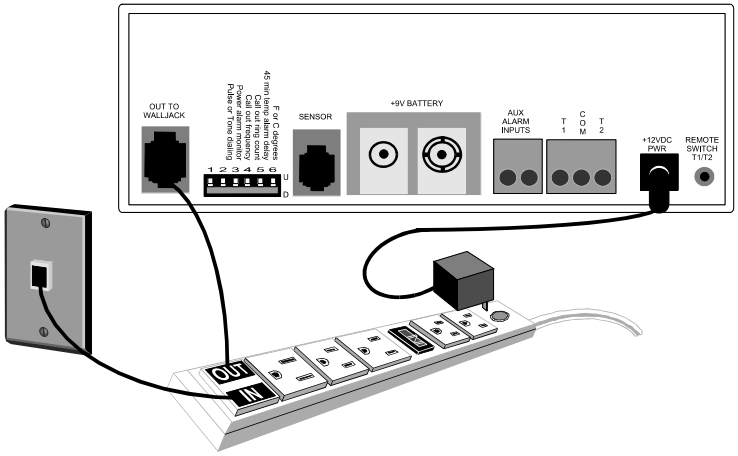
#	Description	Settings	
1	*Pulse or Tone Dial Out.* Select for Pulse Dialing only if you do not have Touch-Tone™ dialing capability at the monitored location.	UP = pulse dialing	DOWN = tone dialing
2	*Power Alarm Monitoring* – you can turn this feature off or on with this switch. If you do not wish to ever receive an alarm phone call related to a power failure, put switch in the UP position.	UP = Power alarm monitoring is OFF	DOWN = Power alarm monitoring is ON
3	*Call Out Frequency.* When the FreezeAlarm goes into alarm mode and begins calling out, it will call the three programmed phone numbers. If no one has canceled the alarm call-out, it will begin the sequence again in either 15 minutes or in 2 hours according to the setting selected.	UP = 2 hour call out frequency	DOWN = 15 minute call out frequency
4	*Call Out Ring Count.* If the FreezeAlarm received no answer when calling a phone number, this switch determines how many times the phone should ring before the FreezeAlarm hangs up the call and moves on to the next programmed number. This saves on long distance charges. Select the 3 ring option and, if the FreezeAlarm is calling an answering machine set to answer on 4 or more rings, the FreezeAlarm will hang up before the answering machine answers, saving on any long distance charge. This may not work in all areas as some telephone companies may still charge for an attempted long distance call which does not go through.	UP = 3 rings	DOWN = 10 rings
5	*45 Minute Temperature Alarm Delay.* This feature provides a 45 minute delay before going into temperature alarm. This is used frequently to monitor walk-in refrigerators or freezers for a rise in temperature. The 45 minute temperature alarm delay can be enabled so it won't alarm while the refrigerator or freezer is being loaded.	UP = The temperature must be out of range for 45 minutes before going into alarm mode and calling out.	DOWN = FreezeAlarm will call immediately when the temperature gets out of range.
6	*Fahrenheit/Celsius Selection.* The FreezeAlarm can report temperatures in either degrees Fahrenheit or degrees Celsius. Select °F or °C.	UP = °C	DOWN = °F

1.6 Connecting Cords, Sensor and Battery:

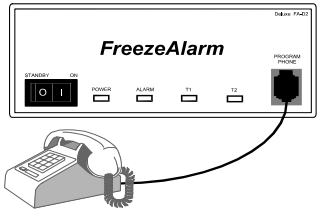
1. Connect the temperature sensor to the place on the back of the FreezeAlarm marked Sensor
2. Connect the plug-in power transformer to the Power connection on the back of the unit. Plug the other end into an AC power outlet or into your surge suppressor power strip (purchased separately).
3. Plug in a 9 volt Lithium battery to the battery connection.

4. Using the telephone cord supplied with the FreezeAlarm, connect one end to the OUT TO WALLJACK connection on the back of the FreezeAlarm and the other end into your telephone jack on the wall.

   If you are using a surge suppressor that also protects the telephone line, there should be an “IN” and “OUT” labeling or diagram for proper connection of the phone lines. See the diagram below for details on the phone line connections and follow the instructions that came with your surge suppressor.

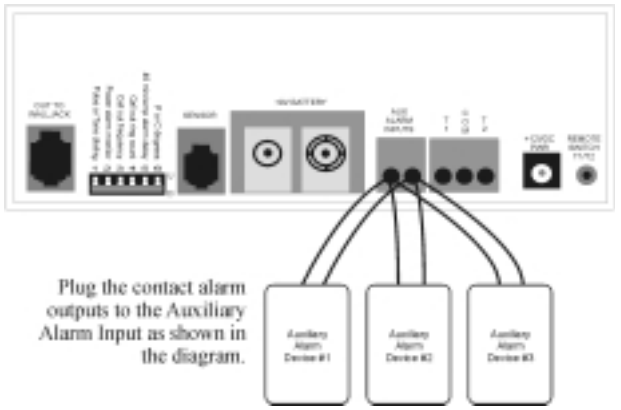


5. Plug in your standard, single line telephone to the “PROGRAM PHONE” jack on the front of your FreezeAlarm. See Figure below.



NOTE:
This phone will only be used to program your FreezeAlarm locally or for locally checking current status of your FreezeAlarm. It is important to UNPLUG this phone from the front after you are done programming or making any changes.

1.7 Connecting Additional Alarm Devices to the Auxiliary Alarm Input:
This is most often used to connect our WaterAlarm, MiniAlarm motion sensor or one of our auxiliary temperature alarms. Any sensor or alarm device that opens or closes a dry (non voltage) contact can be connected to the auxiliary alarm input. Connection of more than one alarm device to the auxiliary alarm input is possible by connecting them in parallel as noted below. The auxiliary alarm input cannot accept any device that sends voltage through the contact wire.



During programming you can set the Auxiliary Alarm Input to monitor for either a contact closure (default position) or for a contact opening. When the Auxiliary Alarm Input is either closed or opened (depending upon the setup), it will trigger the FreezeAlarm to begin calling your preprogrammed telephone numbers and play a special message you can record for whatever alarm device is connected to the auxiliary alarm input. For instance, if you have our WaterAlarm connected, you can record an alarm message that will play warning you of a water emergency at your monitored location instead of the factory default “Auxiliary Alarm” message.

1.8 Using the Remote Switch Feature (T1, T2 and COM connections):
The Remote Switch allows you to remotely turn on or off another device by telephone or remotely switch between two different thermostats to pre-heat or cool your monitored location. This installation is detailed in Appendix B.

2.0 PROGRAMMING:

You can program your FreezeAlarm using a regular home telephone or you can remotely access your FreezeAlarm and program it using a cell phone or a phone at another location. This feature allows you to remotely change programming selections at a later time from any phone in the world. Most first time users program their FreezeAlarm locally, or at the location where the FreezeAlarm is located by using a single line home telephone. A cordless phone may work, but a standard single line home telephone with a wired handset will work best. An explanation of each menu option with helpful hints on programming is provided after the quick programming guide.

2.1 Quick Program:
If you feel comfortable with the various menu options and want to get your FreezeAlarm up and running quickly, follow the steps below. This provides a quick method to program up to three call-to phone numbers into your FreezeAlarm in just a few minutes. You should program at least one call-to

telephone number into your FreezeAlarm for proper operation. Check the factory defaults if you need to change any other settings as they are not discussed in this *Quick Program* section. When the manual tells you to press a number, it is referring to a number on your program telephone's Touch-Tone® keypad. If you need an explanation of each menu option, please go to the next section on the following page.

1. Make sure the dip switches on the back of the FreezeAlarm are set properly for your application. See the dip switch table earlier in this manual for switch explanations.
2. Make sure your FreezeAlarm is connected properly and has a 9 volt lithium battery installed.
3. Check to be sure the toggle switch on the front of the FreezeAlarm is set to STANDBY position. The front ALARM light will blink while in STANDBY mode.
4. Plug a program phone into the PROGRAM PHONE jack on the front of the FreezeAlarm.
5. Pick up the telephone handset and the Main Menu will begin to play.
6. Press 3 to access the Program Menu.
7. Press 1 to review or program phone numbers.
8. Press 1 to review or program phone number *1*.
9. Press 0 to enter a new phone number or to change an existing number.
10. Enter the telephone number followed by the pound "#" key.
11. Press 2 to identify this as a regular phone number and not a pager.
12. Press 9 to return to the Phone Number Menu.
13. Repeat this process for phone numbers 2 and 3.
14. When done entering phone numbers, press 9 to return to the Program Menu
15. Hang up or change any of the other settings as needed.
16. ***After programming is completed, UNPLUG YOUR PROGRAM PHONE from the front PROGRAM JACK!***
17. ***FLIP THE TOGGLE SWITCH ON THE FRONT TO THE "ON" POSITION!***

If this is the first time you have programmed this FreezeAlarm, the factory default settings for the other menu options are as follows:

Security Code 9999
Low Temperature Alarm Setpoint .....45° Fahrenheit or Celsius
High Temperature Alarm Setpoint .....100° Fahrenheit or Celsius
Number of rings before the unit answers .....5 rings
Number of minutes the power should be out before alarming..... 60
Greeting Message: ... "Hello, this is your automated monitoring control system"
Alarm Message: ..... "Hello, this is your automated monitoring control system."
Auxiliary Alarm Message..... "The auxiliary alarm input is in alarm mode"
Auxiliary Alarm Input Setting..... Normally Open

⚠
IMPORTANT WARNING! After Programming, you must return the front toggle switch to the ON position or the FreezeAlarm will not call you if an alarm condition occurs and you will be unable to call into your FreezeAlarm remotely!
⚠
CRITICAL! TEST YOUR FREEZEALARM to make sure it calls your call-to telephone numbers during an alarm. See the Test Procedure detailed on page 18.

2.2 Explanation of Program Menu Options:

Each of the programming options is explained in detail below. Review this before proceeding to program your FreezeAlarm.

MENU OPTION 1: *Review or Program Telephone Numbers*
Program your call-to phone numbers here. You can also review or change any existing phone numbers here if needed as well. The Deluxe FreezeAlarm can dial up to three phone numbers with each phone number consisting of up to 60 digits. You can include pauses and the star key (*) as part of your phone number to accommodate calling cards, different phone features and pager systems. Any or all of these numbers can be to a mobile phone or any other telephone number. These phone numbers are referred to throughout the rest of this manual as "call-to phone numbers".

One or more of the phone numbers may be a pager phone number. If so, you will have the opportunity during the program sequence to identify which numbers are pager numbers and which are regular telephone numbers. In addition, you will also have the opportunity to program a pager display message.

To program a star (*) in your phone number, press the * key on your keypad as part of the phone number. To enter a two second pause in a call-to phone number, press the * star key twice. This will count as two digits of your total 60 allowed for that number. You can combine * keys in a phone number to add both a two second pause and a dialed * star by having three * stars in your phone number sequence. Three * stars equal a 2 second pause followed by a dialed * star. Four * stars equal a four second pause in the dialing sequence.

IMPORTANT NOTES ABOUT ENTERING YOUR CALL-TO TELEPHONE NUMBERS

- **LONG DISTANCE:** Make sure you enter the phone number exactly like you would dial a voice call. Use a 1 and/or area code if needed. If dialing internationally, make sure you have the correct country codes and follow proper international dialing rules. Check with your phone company for assistance determining the correct number.

- **AREA CODES:** Area codes are often changing and the rules for dialing within an area code also change frequently. Make sure you change your call-to phone numbers if area codes or calling rules change in your area.
- **TEST YOUR FREEZEALARM:** It is ***critical*** that you test your FreezeAlarm by following the test procedure on page 18. All phone numbers should be tested to ensure they are programmed correctly and that the FreezeAlarm works properly with your phone line.

Review or Program Pager Display Information: If one or more of the phone numbers you program are to a numeric pager, you can program a numeric message that will be displayed on the pager when it calls. This can be any numeric message up to 15 characters in length.

MENU OPTION 2: ***Review or Program the Temperature Alarm Setpoints:***
This menu option lets you set the high and low temperatures at which you want the FreezeAlarm to dial out for a temperature alarm.

The factory setting for the low temperature alarm is 45° whether you have the unit set to read temperatures in Fahrenheit or Celsius. The high temperature alarm setpoint is 100°F or °C. You can select a temperature alarm setpoint anywhere from -66 to 301°F (-54 to 149°C). The FreezeAlarm can read temperatures to you in either °F or °C based on dip switch number six.

NOTE FOR A NEGATIVE TEMPERATURE ALARM SETPOINT: To enter a negative temperature alarm setpoint, you will need to precede the desired negative temperature with a *. For example, if you want a temperature alarm setpoint of negative 15°, press *** 1 5 #** on your telephone keypad when requested. This will be played back to you by the FreezeAlarm as "negative fifteen degrees".

MENU OPTION 3: ***Review or Program the Security Code:***
The security code is used for two functions by the FreezeAlarm.
1. Password Protection to prevent unauthorized persons from accessing your FreezeAlarm remotely. The factory set security code is 9999. It is highly recommended you change this and write the security code down on the front of this manual and in a safe place at all your call-to locations. Security codes must have four numeric digits.
2. Location Identifier. The security code also provides a location code to the person answering an alarm call from the FreezeAlarm. The FreezeAlarm will note that there is a specific alarm condition "at location ####". This allows a service or monitoring company to quickly identify which location is calling so they can dispatch service personnel to your monitored location most efficiently. This is also an easy way to hear what your security code is if you have forgotten the code.

If you have forgotten your security code, there is no way to remotely change the code. You will need to go to the monitored location, plug a phone into the front of the FreezeAlarm, go to menu option 3 in the programming menu and review or change the security code at that time. If you are receiving alarm calls from your FreezeAlarm, the unit will tell you the security code during the alarm message.

MENU OPTION 4: ***Review or Program the Number of Rings Before the Unit Answers:***
This is also referred to as the "incoming ring count". When you call your FreezeAlarm from a remote location, the FreezeAlarm will be waiting to hear a specified number of rings before it picks up. You can select the number of rings you wish the FreezeAlarm to hear before it will pick up. Through this menu option, you can select to have the FreezeAlarm answer after a specific number of rings have been counted by the FreezeAlarm. The factory default incoming ring count is set at five rings. You can set the ring count from 1 to 30 rings.

This feature is provided for several reasons:
1. If you have an answering machine or voice mail at the monitored location, you generally want people calling that location to be able to leave a message. If the FreezeAlarm answers before your message system answers it will override the answering machine or voice mail. You can program the FreezeAlarm to answer on a number of rings that is greater than that of your message system and still have people leave messages for you. To gain access to your FreezeAlarm instead of the message system, follow the procedures outlined in *Use of Answering Machines or Voice Mail at the Monitored Location* on page 21.
2. When you are visiting your monitored location, you may receive frequent phone calls from outside callers. With a smaller incoming ring count selected, there is the possibility the FreezeAlarm could answer if several callers called in sequence within a three and a half minute period of time. If you normally receive a lot of calls at the monitored location, you may wish to set the incoming ring count to a higher number. This is helpful for businesses who receive a lot of calls or for vacation rental companies that are monitoring multiple locations and don't want their guests to even know there is a FreezeAlarm in their rental property.

MENU OPTION 5: ***Review or Program the Number of Minutes the Power Should be Out Before Calling with a Power Alarm:***
The FreezeAlarm has the ability to call you if the power to the FreezeAlarm has failed. Through this menu option, you can select the number of minutes that the power should be out before it calls you with a power out alarm. You can select any number of minutes from 1 to 120. The power will have to be out continuously for the number of minutes selected before calling you. For example, if you have the power out timer set at 60 minutes and the power goes out for 40 minutes and then comes back on for a brief moment and then goes off again, the timer resets to zero. The FreezeAlarm will keep track of the number of

minutes the power is out and tell you during an alarm call how long the power has been out and if the power is currently on or off. The factory default for the power out timer is 60 minutes. The power monitoring feature can be turned off so that you never receive calls about power failures. This is done by flipping dip switch #2 to the "UP" position on the back of the Deluxe FreezeAlarm. See Dip Switch explanations on Page 7.

MENU OPTION 6: ***To Review or Record Messages:***
You can record several messages on the Deluxe FreezeAlarm. Each message can be approximately 15 seconds long. The following explains how the messages work.

Greeting Message: This is played whenever you call into your FreezeAlarm from a remote location. This greeting message is helpful if you plan on having relatives or neighbors call into your FreezeAlarm to check on the property. If there is no answering machine or voice mail, you may record a message that indicates this machine does not accept messages and requests the caller to try back later. If you do not record a separate Greeting Message, the factory default message is: *Hello, this is your automated monitoring system.*

Main Alarm Message: This is played whenever the FreezeAlarm calls out with an alarm. It will precede the factory alarm messages so it can contain personal information about your name, address, etc. It is useful to record an alarm message that will help people at your call-to locations better identify that the call is from your FreezeAlarm. If calling to a monitored service or a contractor, they may also like a custom alarm message that provides address information. The factory default message is: *Hello, this is your automated monitoring system.* This is then followed by our factory alarm messages telling you specifically what alarm conditions are or have recently occurred.

If you do record your own custom alarm message, the factory recorded messages indicating the specific alarms that are occurring will still play after your custom alarm message has played.

Auxiliary Alarm Message: This is played if the device that is attached to the Auxiliary Alarm Input is in alarm mode (either the contact has closed or opened). This message will only play during alarm call-out to your programmed call-to phone numbers. This message overrides the factory default message of *"The Auxiliary Alarm Input is in alarm mode"*.

Reinstating the Factory Default Messages:
If you record a custom Greeting, Alarm or Auxiliary Alarm Message but decide you would rather have the factory default message instead, you can reinstate the factory default alarm or greeting message.

1. Select the menu option 6 to record messages
2. Press 1: *To Review or Program the (Alarm/Greeting/Auxiliary) Message*

3. Press 0 so you can change the Alarm or Greeting Message
4. The FreezeAlarm will begin playing the menu prompt shown below. **While this message is playing, press the pound (#) key.** The menu prompt will stop and the FreezeAlarm will now play the factory default greeting or alarm message.

   "Begin Recording after the tone. When you have finished recording, press the pound (#) key"

Recording over old messages:
To record over an old message, follow the instructions to program a new message and simply record a new message. The old message will automatically be erased.

MENU OPTION 7: ***To Review or Modify Auxiliary Alarm Setting:***
The auxiliary alarm input is used to plug in additional alarm devices such as our WaterAlarm (WA-20) and our Motion Sensor (MA-S01). These devices are designed to "close" an alarm contact when they go into alarm. Some other alarm devices are designed to "open" an alarm contact when they go into alarm. This menu option allows you to change whether the Auxiliary Alarm Input should monitor for a "closed" or "open" contact. The table below shows you what to select based on what your alarm device will do when it goes into alarm.

If your alarm will "close" when an alarm condition occurs such as our WaterAlarm or MiniAlarm Motion Sensor	Select the Auxiliary Alarm input to be "Normally Open"
If your alarm will "open" when an alarm condition occurs	Select the Auxiliary Alarm input to be "Normally Closed"

2.3 Programming Your FreezeAlarm Locally:

At the location where the FreezeAlarm is located

1. Make sure the toggle switch on the front of the FreezeAlarm is on the STANDBY position for programming. The ALARM light on the front of the FreezeAlarm will begin flashing.
2. Make sure you have a regular, single line telephone plugged into the front of the FreezeAlarm where it says PROGRAM PHONE. This will be referred to as your Programming Phone. NOTE: After programming is completed, unplug the Programming Phone from the PROGRAM PHONE jack on the front of the FreezeAlarm. A phone left plugged into the front of the FreezeAlarm cannot operate as a regular telephone. If you want to share a phone with your FreezeAlarm in the same wall jack, you will need a telephone jack line splitter. See the *Connecting Cords, Sensor and Battery* section on page 8 for more information.
3. Pick up the handset on your Programming Phone. The FreezeAlarm will begin talking to you with the Main Menu.

   Main Menu:

   You are now in the main menu.

For current status, press 1.
For remote switch status, press 2.
To enter the Program Menu, press 3.

Current Status: Provides the current status of the various sensors. *The current temperature is XX degrees, the power is on (or off), the battery is at X.XX volts and the auxiliary alarm input is currently (in/not in) alarm mode.*

Remote Switch Status: This is where you can easily change the position of the remote switch status. This can be used to switch between one thermostat set at a lower temperature to another thermostat set at a higher temperature, allowing you essentially warm up a space before you arrive. It can also be used to turn on or off a remote device by telephone. Use of this feature is detailed in Appendix B on page 39.

Program Menu: It is recommended you listen to all the menu options once before programming to become familiar with the program menu. At the end of the menu, it will pause and then start playing from the beginning again.

4. **IMPORTANT:** After programming is completed, flip the front ON/STANDBY switch to the ON position for normal operation of your FreezeAlarm.

   IMPORTANT WARNING! After Programming, you must return the front toggle switch to the ON position or the FreezeAlarm will not call you if an alarm condition occurs and you will be unable to call into your FreezeAlarm remotely!

   CRITICAL! TEST YOUR FREEZEALARM to make sure it calls your call-to telephone numbers during an alarm. See the Test Procedure detailed on page 18.

2.4 Programming Your FreezeAlarm Remotely:

By calling into your FreezeAlarm from a remote phone or cell phone

1. Make sure all the connections have been made according to section 1.5 on page 8. You will not need to plug a phone into the "PROGRAM PHONE" jack on the front of the FreezeAlarm to program the FreezeAlarm remotely.
2. Make sure the toggle switch on the front of the FreezeAlarm is in the ON position.
3. From an outside phone or a mobile/cell phone, call the telephone number of your monitored location. The FreezeAlarm will answer after five rings have been heard by the FreezeAlarm. If you have an answering machine or voice mail at the monitored location, you may need to place two or more calls to

the monitored location to circumvent the answering machine or voice mail. For more details on this topic, see the section about Answering Machines and Voice Mail on page 21.

4. When the FreezeAlarm answers, you will hear the following: *Hello, this is your automated monitoring system* (or a custom greeting message if recorded earlier). *The current temperature is XX degrees, the power is on* (or off), *and the battery is at X.XX volts.*

   If no alarm conditions are present at the current time, you will then hear:

   There are no alarm conditions occurring at this time. To access the main menu, enter your four digit security code followed by the pound (#) key.

   If alarm conditions do exist when you call into your FreezeAlarm, the FreezeAlarm will play any alarm conditions present at that time instead of the above message. See the section *What Happens During An Alarm* on page 22 for more details on what to do if this message is playing. You can still continue to remotely program the unit even if alarm conditions are present.
5. Enter your four digit security code followed by # on your telephone key pad. If the security code is correct, the main menu will play. If the security code is incorrect, you will be given one more chance and then the FreezeAlarm will say *Incorrect Security Code, good-bye* and then hang up.
6. From the Main Menu, select menu option 3 to enter the Program Menu. From the program menu, you can review or program your call-to telephone numbers, security code, temperature alarm setpoints, and other options. There are six programming options in the Programming Menu. Each Menu Option is discussed in detail in section 2.2.
7. **IMPORTANT:** Flip the front ON/STANDBY switch to the ON position for normal operation of your FreezeAlarm.

   IMPORTANT WARNING! After Programming, you must return the front toggle switch to the ON position or the FreezeAlarm will not call you if an alarm condition occurs and you will be unable to call into your FreezeAlarm remotely!

   CRITICAL! TEST YOUR FREEZEALARM to make sure it calls your call-to telephone numbers during an alarm. See the Test Procedure detailed below.

2.5 Testing Your FreezeAlarm

It is CRITICAL that you test your FreezeAlarm to ensure you have programmed all the telephone numbers correctly and to make sure the FreezeAlarm is working properly with your telephone line. Before you start the test, make sure the front toggle switch is in the ON position.

To test an alarm call-out based on a cold temperature, wrap the end of the temperature sensor in a plastic bag and insert into a cup of ice or put the sensor in a freezer. IT IS VERY IMPORTANT THAT THE TEMPERAUTRE SENSOR DOES NOT GET WET. The sensor is not designed for wet environments or for submersion into any liquids. Note that if you have the 45 minute temperature alarm delay "on", it will take 45 minutes or more before the alarm call-out begins. The temperature alarm delay feature can be changed based on the position of dip switch #5. See the dip switch table on page 7.

You can also test the alarm call-out simply by unplugging the temperature sensor. With the sensor unplugged the unit automatically thinks there is a temperature alarm and it will begin calling the three programmed phone numbers.

NOTE: When you first power up your FreezeAlarm with either the battery or the plug in transformer, the unit waits for five minutes before checking any sensors.

After you have verified the programmed call-to phone numbers have been called successfully, you must still cancel the alarm call-out. Make sure the temperature sensor is out of the ice and at room temperature again or plugged back into the SENSOR location on the back of the FreezeAlarm. To cancel the alarm and reset the FreezeAlarm, flip the front toggle switch to the STANDBY position and then again back to the ON position. The red alarm light on the front of the FreezeAlarm should go out. Your FreezeAlarm is now ready for operation.

3.0 OPERATION OF YOUR FREEZEALARM:

3.1 Standby Mode:

On the front of your FreezeAlarm is a toggle switch with STANDBY or ON positions. The STANDBY position is primarily used for programming purposes only. The ON position is where your FreezeAlarm should be once programming is completed. In STANDBY mode, you can access the main and programming menus, but you **cannot remotely dial into your FreezeAlarm and more importantly, it cannot call you if an alarm condition occurs.**

Some users may want to temporarily flip the switch to the STANDBY mode if they are visiting the monitored location and don't want the possibility of an incoming call being picked up by the FreezeAlarm. We don't recommend the STANDBY mode for this scenario and instead suggest you change your incoming ring count selection to a higher number so virtually all incoming callers will either go to your answering machine/voice mail or you have sufficient rings to allow you to get to the call well before the FreezeAlarm answers.

NOTE: If you leave your FreezeAlarm in the STANDBY mode, the FreezeAlarm will not call you if there is an alarm and you will be unable to call into your FreezeAlarm from a remote location.

3.2 Calling into your FreezeAlarm:

One of the best features of the FreezeAlarm is the ability to remotely check the current temperature, power status, auxiliary alarm status and battery status at your monitored location. You can also change the remote switch status for turning up and down heat or turning on or off another device remotely. You can also change any of the program menu settings including the call-to phone numbers if desired. If you have an answering machine or voice mail at the monitored location, make sure you read the section *Use of an Answering Machine or Voice Mail at the Monitored Location* in section 3.3 on page 21 before proceeding. The following is the procedure for remotely accessing your FreezeAlarm to check current conditions or change program menu options.

To Check Current Conditions at your Monitored Location:

1. Call the telephone number of your monitored location where the FreezeAlarm is located
2. When the FreezeAlarm answers, you will hear the following:
   Hello, this is your Automated Monitoring System (Or you will hear your custom greeting message that was recorded earlier)

   The current temperature is # # degrees, the power is on (or *off*) *and the battery is at #.# # volts. There are no alarm conditions occurring at this time. To access the main menu, enter your four digit security code followed by the pound "#" key.*
3. You can either hang up or go into the main menu by entering your four digit security code.

Remotely Changing the Remote Switch Status:

The Remote Switch Status is a feature that is most often used to switch between one thermostat set at a low temperature to one set at a high temperature, thereby allowing you to remotely turn up or down the temperature in your remote home or cabin. The remote switch can also be used to turn on or off another device. Details on how to hook up devices to the T1/T2/COM connections on the back of the FreezeAlarm are detailed beginning on Page 39.

To change the Remote Switch Status:

1. Access the MAIN MENU as described above. You will hear the following:
   You are now in the main menu.
   For current status, press 1.
   For remote switch status, press 2.
   To enter programming menu, press 3.
2. Select Menu Option 2 and you will hear:
   The position of the remote switch is currently T1 (or *T2*). *To change, press 0 or to return to the main menu, press 9.*
3. Toggle between the T1/T2 switch as desired.

NOTE: The Remote Switch Status can only be changed by authorized personnel who have correctly entered a security code. The switch can also be changed while at the monitored location simply by pressing and holding in the Remote Switch button on the back of the FreezeAlarm. This will toggle between the T1 and T2 relay positions.

To Remotely Change any Program Menu Settings Including Call-To Phone Numbers:

1. Call the telephone number of your monitored location where the FreezeAlarm is located
2. When the FreezeAlarm answers, you will hear the factory greeting message or your custom greeting message recorded earlier. This will be followed by the current temperature, power status and battery voltage at your monitored location.
3. Enter your four digit security code followed by # to access the main menu.
4. Press 2 to access the Program Menu.
5. Press the number of the menu option you wish to change and follow the prompts. See menu option explanations starting on page 12 or refer to the menu flow charts in the Appendix.

3.3 Use of an Answering Machine or Voice Mail at the Monitored Location:

If you have an answering machine or voice mail at the monitored location where your FreezeAlarm is located, there is an easy way to still use your answering machine or voice mail and access the FreezeAlarm to check current status or to cancel the alarm call-out.

The FreezeAlarm will answer after it hears a specified number of rings. This number of rings is the "incoming ring count" selection programmed during the programming section. The FreezeAlarm can count incoming rings over multiple calls to the FreezeAlarm. The multiple calls must be made within three and a half minutes of the first call. This allows most incoming calls to go to the user's answering machine or voice mail service prior to the FreezeAlarm answering. The FreezeAlarm will answer based on your "incoming ring count" selection programmed during the programming section. The factory default incoming ring count is five rings.

How This Works (an example):

1. During Programming, you set your FreezeAlarm to answer on a specified number of incoming rings. You set up your answering machine or voice mail to answer on a number of rings less than what you have selected for your FreezeAlarm to answer on. For example, if your FreezeAlarm is set to answer on 5 rings, set your answering system to answer on four rings or less.
2. When your monitored location receives an incoming call, it will go to the answering system first because that is set to answer on four or fewer rings while your FreezeAlarm is set to answer on five rings.

3. If you wish to call your FreezeAlarm, place two calls to your monitored location.
   a. On the first call, let the phone ring two or three times and then hang up before your answering system answers. The FreezeAlarm will remember those first two or three rings in memory for the next three and a half minutes.
   b. On your second call, let the phone ring another two or three times. Your FreezeAlarm will answer first because it remembered the first two or three rings and with the second set of rings, it accumulated a total of five rings and now answers before your answering machine or voice mail. If you have your FreezeAlarm set to answer on a high number of rings, you may need to place more calls to get the FreezeAlarm to eventually answer.

Note that after three and a half minutes, the FreezeAlarm's incoming ring counter will reset to zero. If you receive many incoming calls to your monitored location (like at a business), you would want to set your incoming ring counter to a high number. NOTE: If you have a high incoming ring count selected, you need to place a number of calls in a short period of time (three and a half minutes) to access your FreezeAlarm remotely.

3.4 What Happens During An Alarm:

The FreezeAlarm will call your programmed call-to telephone numbers if an alarm condition has occurred. It will continue to call you every 15 minutes (or every two hours depending upon dip switch #3's position) even if the alarm condition has been corrected, but the alarm call-out has not yet been canceled. Note that canceling the alarm call-out does not disable the FreezeAlarm. The FreezeAlarm will continue to monitor all conditions including those in alarm.

Alarm Call-Out Sequence:

The FreezeAlarm will continue to call all programmed call-to phone numbers until someone acknowledges the alarm and cancels the alarm call-out.

The FreezeAlarm will call the first call-to telephone number and play its alarm message to a person, answering machine or voice mail. If it gets a busy signal, no answer or a person who doesn't know how to cancel the alarm call-out, it will immediately start calling the second number. If the alarm call-out isn't canceled by the second call-to person, it will immediately move to the third number. If no one at that call-to number cancels the alarm call-out, the unit will wait either 15 minutes or 2 hours and then start the sequence all over again.

The only way to stop the FreezeAlarm from calling the call-to phone numbers is to have a person at one of the call-to numbers cancel the alarm call-out as described later in this manual or go to the monitored location and switch the toggle switch to STANDBY and then back again to ON. This resets the FreezeAlarm.

The FreezeAlarm is persistent and always wants you to know that an alarm has occurred, even if the alarm condition has corrected itself. For example: The power goes out long enough so that the FreezeAlarm notes a power alarm and begins calling your call-to phone numbers. If none of the people at the call-to numbers are home to answer the call, and the power is eventually restored, the FreezeAlarm will continue to call the call-to phone numbers until the alarm call-out has been canceled.

Multiple Alarms

It is possible to receive multiple alarm calls from your FreezeAlarm even if you believe you have canceled one of the alarms. Here are some examples:

Example 1:

If you receive a power out alarm and cancel that alarm call-out, your FreezeAlarm will still be running on back-up battery power until the power is restored. It is conceivable therefore, that the battery could drop below 7.0 volts and begin calling out again, but this time with a battery alarm. You would need to cancel this alarm call separately from the earlier power out alarm. If power continues to be out, you could also receive a separate temperature alarm later because your heating system will most likely not be working. This alarm call-out would have to be canceled separately as well.

Example 2:

Assume you have received a power out alarm and have canceled the alarm call-out. A short time later, you receive another power out alarm. What has happened is that your power was restored after you canceled the first alarm call-out and the power out alarm was automatically reset. A short time later, the power went out again (not infrequent in remote areas). This caused the FreezeAlarm to initiate another power out alarm and begin calling your call-to phone numbers again.

Example 3:

This same multiple alarm call-out can happen with a temperature alarm as well, especially if the temperature outside your monitored location is close to the temperature alarm setpoint you have programmed on your FreezeAlarm. If your heating system fails or power is out, the temperature in your monitored location begins to drop. In the evening, when it is colder outside, it may drop below your temperature alarm setpoint inside the home and then call you with a temperature alarm. Then, during the day, the temperature may return above the temperature alarm setpoint because the sun is out. This would cause the FreezeAlarm to potentially reset during the day and call you again at night – at 2am of course.

3.5 How to Cancel the "Alarm Call-Out" and reset your FreezeAlarm

Two things need to happen to reset the FreezeAlarm. The alarm call-out must be canceled and the alarm condition needs to be corrected. Once both of these things have happened, the FreezeAlarm will automatically reset.

You can cancel the alarm call-out in one of three methods.

1. If you answer a call from the FreezeAlarm, the FreezeAlarm will give you an opportunity to enter the four digit security code which will cancel the alarm call-out.
2. If the FreezeAlarm has left alarm messages on your answering machine or voice mail, you can remotely call into the FreezeAlarm and cancel the alarm call-out by following the prompts.
3. Go to the monitored location and if the FreezeAlarm is still dialing out to the call-to phone numbers, you can simply switch the front toggle switch to STANDBY mode and then back again to the ON position. This is a physical reset that can only be done at the monitored location. You will see the red **ALARM** light go off when you reset the FreezeAlarm in this fashion. Doing this does not erase any programmed phone numbers, security codes or other settings. Those settings will be retained indefinitely even if the power cord is unplugged and the battery is removed.

Canceling the Alarm Call-Out during a call from the FreezeAlarm:

When the FreezeAlarm calls you, you will initially hear either the factory recorded alarm message or your custom alarm message that you recorded during the programming section.

> *Hello, this is your Automated Monitoring System.* (Or you will hear your custom alarm message that was recorded earlier)
>
> *There is an alarm condition at your remote monitored location. The following alarms currently exist or have occurred recently at location XXXX.*
>
> This will be followed by one or more alarm conditions. A four digit location code will also be played. This is the same number as your security code.
> *There is a temperature alarm.*
> *The power at location # # # # has been out for # # # minutes and is currently on* (or *off*).
> *There is a battery alarm at location # # # #.*
> *The auxiliary alarm input is in alarm mode* (or your custom recorded auxiliary alarm message will play here instead).
>
> *Please check conditions at your monitored location immediately.*
>
> This entire message will repeat again and be followed by:
>
> *To cancel the alarm call-out, enter your four digit security code followed by the pound "#" key.*
>
> You will be given two chances to enter the correct security code. If incorrect two times, the FreezeAlarm will say, *Incorrect Security Code, good-bye* and

then it will hang up. If you enter the correct security code, the FreezeAlarm will respond with:

The alarm call-out is now canceled. To return to the main menu, press 1. Otherwise, hang up.

Calling into your FreezeAlarm to Cancel the Alarm Call-Out:
If you received calls from your FreezeAlarm and know there is an alarm at your monitored location, you can call into your FreezeAlarm from any phone in the world and remotely cancel the alarm call-out without having to wait for another call from your FreezeAlarm. If you have an answering machine or voice mail at the monitored location, read the section *Use of an Answering Machine or Voice Mail at the Monitored Location* on page 21 before proceeding.

Follow this procedure:
1. Call your monitored location's phone number where the FreezeAlarm is located.
2. When the FreezeAlarm answers, you will hear the following:

Hello, this is your Automated Monitoring System. (Or you will hear your custom alarm message that was recorded earlier)
The current temperature is # # degrees, the power is on (or *off*)*, and the battery is at #.# # volts. There is an alarm condition at your remote monitored location. The following alarms currently exist or have occurred recently at location # # # #.*

This will be followed by one or more alarm conditions. A four digit location code will also be played. This is the same number as your security code.
There is a temperature alarm at location # # # #
The power at location # # # # has been out for # # # minutes and is currently on (or *off*).
There is a battery alarm at location # # # #.
The auxiliary alarm input is in alarm mode (or your custom recorded auxiliary alarm message will play here instead).
Please check conditions at your monitored location immediately.

This entire message will repeat again and be followed by:

To cancel the alarm call-out, enter your four digit security code followed by the pound "#" key.

You will be given two chances to enter the correct security code. If incorrect two times, the FreezeAlarm will say, *Incorrect Security Code, good-bye* and then it will hang up. If you enter the correct security code, the FreezeAlarm will respond with:

The alarm call-out is now canceled. You are now in the main menu. From here, you can either access main menu functions or hang up.

If the Alarm Call-Out Has Been Canceled By Someone Else:
Since the FreezeAlarm can call multiple phone numbers, there is a chance that a person at one of the other call-to locations may have canceled the alarm call-out prior to your phone call to the FreezeAlarm. If that occurs, you will still hear the current status and all the alarm conditions when you call into the FreezeAlarm, but you will not be given a chance to cancel the alarm call-out. Instead, the FreezeAlarm will ask for your four digit security code to access the main menu. You can either enter your security code to check current conditions again or hang up and determine the steps needed to correct the alarm conditions.

It is even possible that one of your other call-to people has canceled the alarm call-out and the alarm conditions have improved at your monitored location. If that has occurred, you will not hear any alarm conditions, but instead, you will be given a current status and then an opportunity to enter the main menu.

3.6 Replacing the Back-Up Battery:
When the battery requires replacing, we highly recommend replacing it with a new 9 volt lithium battery. Follow this procedure to change the back-up battery.
1. Switch the front toggle switch to the STANDBY position.
2. Remove the old battery and insert the new battery.
3. Switch the front toggle switch back to the ON position.

A fresh 9V lithium battery will provide approximately 10 to 15 hours of power to the FreezeAlarm if it is calling out every 15 minutes to all three phone numbers. If it is calling to fewer numbers, calling out every 2 hours or the alarm call-out was cancelled during one of the first calls, the battery life should be longer. Too many variables exist to provide accurate battery life for every condition.

There are other battery and power supply discussed in section 4.4 on Page 27.

3.7 Disconnecting the FreezeAlarm for Seasonal Storage:
Your FreezeAlarm can provide year round protection, but if desired, it can be safely stored for seasonal use. To store your FreezeAlarm, disconnect all cables and wires and take out the battery. If you leave a battery in your FreezeAlarm, the battery will be dead the next time you are ready to use your FreezeAlarm. Storing electrical devices with batteries in place is not recommended. Store your FreezeAlarm in a dry place with no excessive temperatures.

The FreezeAlarm will indefinitely retain all programmed call-to phone numbers and other programmed settings, even if the power cord is disconnected and the battery has been removed. It is recommended you check all settings when reconnecting your FreezeAlarm to double check call-out phone numbers and

verify all settings are still correct. **It is critical that you TEST your FreezeAlarm once each year.**

4.0 OTHER INSTALLATION NOTES:

4.1 Answering Machines at the Call-To Locations:

If you have an answering machine or voice mail at any of the call-to locations, the FreezeAlarm will generally leave a portion of its alarm message on the answering machine or voice mail. You may want to test this as some answering systems do not pick up the message. Answering machines and voice mail will not affect or stop the call-out sequence in any way.

4.2 Extending the Temperature Sensor Length:

The temperature sensor may be extended using standard, four conductor telephone extension wire up to 100 feet (30.5m) from the FreezeAlarm unit. Extending the sensor more than 100 feet will increase the temperature that the FreezeAlarm senses by about 1°F/C for every 100 feet added. In other words, an extension of 600 feet would give you a temperature that is approximately 5°F/C higher than the actual temperature.

The connection at the end of the temperature sensor that normally plugs into the FreezeAlarm is a male RJ9 connection. This is a smaller connection than a regular telephone line. You can either make or purchase an RJ9 extension wire or simply splice in additional four conductor telephone wire in between the sensor and RJ9 connection ends. Note that if you are extending sensors outdoors and/or underground, consideration should be given to using shielded wire inside metal conduit. Both shield and conduit should be connected to a ground. This helps prevent stray voltage from interfering with the sensor's signal.

4.3 Extending the Phone Cord Length:

You may use a longer telephone extension cable to place the FreezeAlarm unit at a further distance from an available telephone jack. The FreezeAlarm has been tested to operate on a phone line indoors at a distance of 1,000 feet (304m). Make sure you use four conductor telephone wire. This is available at most hardware and discount department stores. If you are extending this to the outdoors, consideration should be given to using shielded wire inside metal conduit. Both shield and conduit should be connected to a ground.

4.4 Back-Up Battery Options:

The FreezeAlarm has a connection for a 9 volt battery which can supply power to the unit should the AC power be disconnected or out. A fully charged 9 volt lithium battery will provide 10 to 15 hours of operation. During this time, however, you will likely receive a "Battery Alarm" call from your FreezeAlarm meaning the battery has gone below 7.0 volts. Once the battery drops to about 6.0 volts, the FreezeAlarm can no longer operate.

If you wish to have a longer battery option, consider connecting 6 "D" cell alkaline batteries together in series. This produces the required 9 volts of DC power and also provides about 7 to 10 days of power from fully charged batteries.

In addition, the FreezeAlarm can accept up to 12 volts of DC power through the battery connection. Because of this, you could connect a 12 VDC battery to the battery terminals on the FreezeAlarm and have a much longer battery life than even the "D" cell battery option described above. Control Products has not tested this option nor have we determined the operational life when the FreezeAlarm is running off this battery option. For more information on this application, contact Technical Support.

Control Products offers some other battery options. Please call Customer Service or visit our web site at www.controlproductsonline.com for accessories.

5.0 COMMONLY ASKED QUESTIONS:

1. I have pulse dialing on my phone line. Can I use the FreezeAlarm?
   Yes. There is a pulse/tone dip switch on the back of your FreezeAlarm. Put this switch in the UP position to dial out in pulse dialing mode. If you are programming the FreezeAlarm locally using a phone plugged into the front of the FreezeAlarm, your telephone must be set to tone because the FreezeAlarm's menu structure requires touch tones to operate. Once you have completed the programming functions, you can reset your phone back to pulse mode.
2. I have to dial 9 before I can make a phone call. Can I do this?
   Generally, the FreezeAlarm should be able to dial 9 or any other sequence of numbers during a phone call. If you need to dial a number to get an outside line or a dial tone, it is recommended you program in a 9 followed by a pause. This will allow the phone system time to get the dial tone before the FreezeAlarm begins playing the rest of the digits of your call-to phone number.
3. Do I need a dedicated phone line for my FreezeAlarm?
   No. The FreezeAlarm uses any existing telephone line. The only time it uses the line is if it needs to call out or if you are calling into the FreezeAlarm. If you have a commercial phone system at the monitored location, the FreezeAlarm may work, but it needs to be tested. An easy way to know if your phone system will work is to take a regular, single line telephone and plug it into the telephone jack. If you get a dial tone when you pick up the handset, your FreezeAlarm should work as well. Unfortunately, there are hundreds of different phone systems and phone companies in the United States and Canada and we cannot guarantee that we will work with all of them.
4. I have high speed internet access and telephone service through my cable or phone company. Can I still use a FreezeAlarm on that phone line?

In most cases, you can use these types of phone lines, but you should utilize appropriate telephone filters as specified by your DSL or Cable Phone Service Provider. Be advised that these phone lines are not regulated the same way a regular telephone line is and may interpret the Touch-Tones® differently than that of a regular POTS telephone line. More important is that DSL and cable provided phone service from your telephone company may require that the power is on in the monitored premises. A regular telephone line gets its power from the telephone company and will often operate even if the regular power is out in the premises. This means that if you have one of these phone services, your FreezeAlarm WILL NOT CALL OUT IF THE POWER IS OUT!

5. If I unplug the FreezeAlarm or take out the battery, will I have to re-program all my telephone numbers and settings?
   No. The FreezeAlarm uses a special memory that retains all of your programmed call-to phone numbers and settings indefinitely.
6. How do I reset my FreezeAlarm?
   The FreezeAlarm automatically resets itself when the alarm call-out has been canceled and the alarm conditions have been corrected.
7. My temperature sensor is damaged.
   We offer replacement temperature sensors. The part number is TS-10-FA. Order from our customer service department.

6.0 TROUBLESHOOTING:

1. I did a test and my FreezeAlarm is not calling out to the programmed phone numbers.
   Double check that all phone numbers are entered correctly. Did you include a "1" or area codes if necessary? Check the phone line connection. Is the phone cord plugged into the FreezeAlarm and wall jack correctly? Do you have a single line telephone line? If doing a test, did you get the FreezeAlarm to go into alarm? Is the red alarm light on? If not, re-do the test based on the procedure outlined in the manual. Try adding a pause in front of the telephone number. A pause is two stars "" in front of the phone number.*
2. The FreezeAlarm is not responding when I press the keys on my touch-tone phone.
   Check to make sure your phone is set to the tone mode so key presses are in touch-tone mode. Try pressing the keys for different lengths of time – either longer presses or very short presses. Press slowly with ½ second breaks between key presses. If this still does not work, try another phone or dial in remotely to program. If the tones are not being accepted when you dial into the FreezeAlarm, try a different phone or even a cell phone.
3. The FreezeAlarm is not answering.
   Either the phone lines are down or the power is out and the battery has died preventing the FreezeAlarm from answering the phone.
4. I cannot cancel the alarm call-out. The FreezeAlarm keeps calling me.

Are you entering the correct security code? Do you hear the message that the alarm call-out has been canceled? If not, your security code may be incorrect. Are you hearing the exact same alarm message each time, even after you have canceled the alarm call-out? If not, then the FreezeAlarm is calling with different alarms each time. See the Multiple Alarms section on page 24.

5. I am receiving false temperature or power alarms.
   The FreezeAlarm's temperature sensor is accurate to within 3°F of the actual temperature. Your sensor may be too close to a cold window or other colder spot at the monitored location. You may also have the temperature on your thermostat set too close to the temperature alarm setpoint on your FreezeAlarm. Either change the thermostat setting or your temperature alarm setpoint so there is a 5 degree difference in temperature. False power alarms are most likely the result of the power going off and then back on before you've had the chance to cancel the alarm call-out.
6. I am receiving false Auxiliary alarms.
   In some environments, the auxiliary alarm input can be sensitive to high voltage power lines, radiation, or microwave transmissions and accidentally trip the auxiliary alarm – even if you don't have anything plugged into it. If this happens, move the unit to a new location with less interference or shield the unit and its temperature sensor so as to avoid or minimize the interference.
7. All the lights are off on my FreezeAlarm.
   If the power is out or the power cord is unplugged, the lights on the FreezeAlarm will not be illuminated. This is designed to save battery power during a power failure. This could also signal that something serious has happened to your FreezeAlarm. Check power connections and if you still have no lights, call Customer Service.
8. I am getting a temperature reading of 302°F (150°C) or a temperature reading of -50°F (-XX°C).
   If you are receiving a very high temperature sensor reading, your temperature sensor is either unplugged, not plugged in correctly or it has been damaged. Replacement sensors are available. Sensor part number is TS-10-FA.
9. The alarm light is blinking.
   This means your FreezeAlarm is in the STANDBY mode. In this mode, it cannot answer incoming calls and it cannot dial out during an alarm.

7.0 WARRANTY AND REPAIR INFORMATION:

7.1 Contacting Us:

For more information about your FreezeAlarm, contact one of our Customer Service Representatives at:

Control Products, Inc.
1724 Lake Drive West
Chanhassen, MN 55317
Phone: 952-448-4101 Fax 952-361-9420
Email: customerservice@controlproductsinc.com
Internet: www.controlproductsonline.com

Model Number Information:

The model number of your FreezeAlarm is the FA-D2.

Replacement temperature sensors are available. Order the TS-10-FA from Customer Service.

Custom Design and Modifications:

Since 1985, Control Products, Inc. has been designing and manufacturing unique, exciting and technologically advanced electronic control circuits for both commercial and consumer use. We can modify one of our many standard products, or our in-house engineering staff and state-of-the-art manufacturing team can build a project from the ground up. Please contact our customer service department to arrange a personal visit from one of our representatives, posted in facilities through the United States, or visit our website at www.controlproductsinc.com.

7.2 Limited Warranty:

Warrantor: Dealer, Distributor, Retailer, Manufacturer

Warranty and Remedy:

We believe the FreezeAlarm is a superior product. Although we take extreme pride in producing and testing a product that will function properly, we cannot guarantee that there will never be a defective unit or that a unit will function on all the thousands of phone lines and communication equipment in existence. For this reason, it must be clear that the Warrantors are not insuring your premises or guaranteeing that there will not be damage to your person or property if you use this Product. If you are not comfortable with our Limited Warranty, or completely satisfied with the Product, we encourage you to return the unused Product for a full refund within 30 days of purchase. Thank you for your understanding.

One Year Limited Warranty - Control Products, Inc. warrants its product to be free from defects in material and workmanship under normal use for one year, and is not responsible for consequential damages or installation costs of any nature. In the event that the Product does not conform to this Warranty at any time during the period of one year from original purchase date, Warrantor will repair the defect and return it to you at no charge. IMPORTANT: The Warranty is limited to replacement of the Product ONLY. Secondly, because every phone line differs, we strongly encourage you to fully test this Product in its

actual application. This should include a full test, involving the Product actually dialing to its designated locations and someone verifying the proper response.

This Warranty shall terminate and be of no further effect at the time the Products is 1) damaged by extraneous causes such as fire, water, power surge, electrical spike, lightening, etc., or not maintained as reasonable and necessary; 2) modified; 3) improperly installed; 4) repaired by someone other than the Warrantor; 5) used in a manner or purpose for which the Product was not intended.

WARRANTORS' OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT ONLY. THIS WARRANTY DOES NOT COVER PAYMENT OR PROVIDE FOR THE REIMBURSEMENT OF PAYMENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

It must be clear that the Warrantors are not insuring your premises or guaranteeing that there will not be damage to your person or property if you use this Product. The Warrantors shall not be liable under any circumstances for damage to your person or property or some other person or that person's property by reason of the sale or use of this Product, or its failure to operate in the manner in which it is designed. The Warrantors' liability, if any, shall be limited to the original cost of the Product only. Use of this product is at your own risk.

7.3 Repair and Service:

In the event that the Product does not conform to this Warranty, the Product should be shipped or delivered freight prepaid to Warrantor with evidence of original purchase. If in any way you're not comfortable with this product or its Limited Warranty, we encourage you to return it, unused within 30 days of original purchase date with evidence of the purchase date.

The FreezeAlarm should only be repaired by Control Products or an authorized service representative. Do not attempt to repair or fix your FreezeAlarm or have it serviced by anyone other than an authorized service representative or you will void your warranty.

To return a product to Control Products:

All products being returned to Control Products, Inc. must have a valid Returned Goods Authorization Number (RGA #) from Control Products, regardless of why the product is being returned. Warranty returns will be honored only with an RGA #. Ship warranty return products prepaid to Control Products, 1724 Lake Drive West, Chanhassen, MN 55317. Control Products will, at its option, either repair or replace the product free of charge and return the repaired unit or replacement unit at the lower cost shipping prepaid. Products returned for credit are subject to a 25% restocking charge. Returns resulting from errors by the seller are not subject to this charge. All returns must include evidence of original purchase, showing purchase date. The RGA # should be clearly marked on the outside of the package containing the product.

To request an RGA #, call Control Products at 952-361-4101 and ask for Customer Service. Failure to have an RGA # may result in lost product or significant delays in handling your return. Products without an RGA # clearly marked on the outside of the package are not the responsibility of Control Products, Inc.

8.0 FCC & UL CERTIFICATION STATEMENTS:

FCC – PART 68: This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the back of your FreezeAlarm is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive REN's on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN's, contact your local telephone company. The REN for this product is shown above and is also identified as part of the FCC product identifier shown on the label on the back of your FreezeAlarm. The REN for other devices will be identified on a label on the product in the FCC product identifier or listed separately. If there is a product identifier number, it will be in a format as US:AAAEQ##TXXXX. The ## is the REN number shown without a decimal point (e.g., 03 is a REN of 0.3).

If this FreezeAlarm causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with your FreezeAlarm, for repair or warranty information, please contact Control Products at 952-361-4101. Other contact numbers and information can be found at the end of this instruction manual. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved. The FreezeAlarm should be repaired only by Control Products or an authorized service representative. Contact Control Products for the nearest authorized service representative.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line ensure the installation of your FreezeAlarm does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

FCC – PART 15: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Canada's Industry Standard:

Notice: The Canadian Industry Standard label identifies certified equipment. This certification means the equipment meets certain telecommunications network protective operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, where the company's inside wiring is associated with a single line, individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

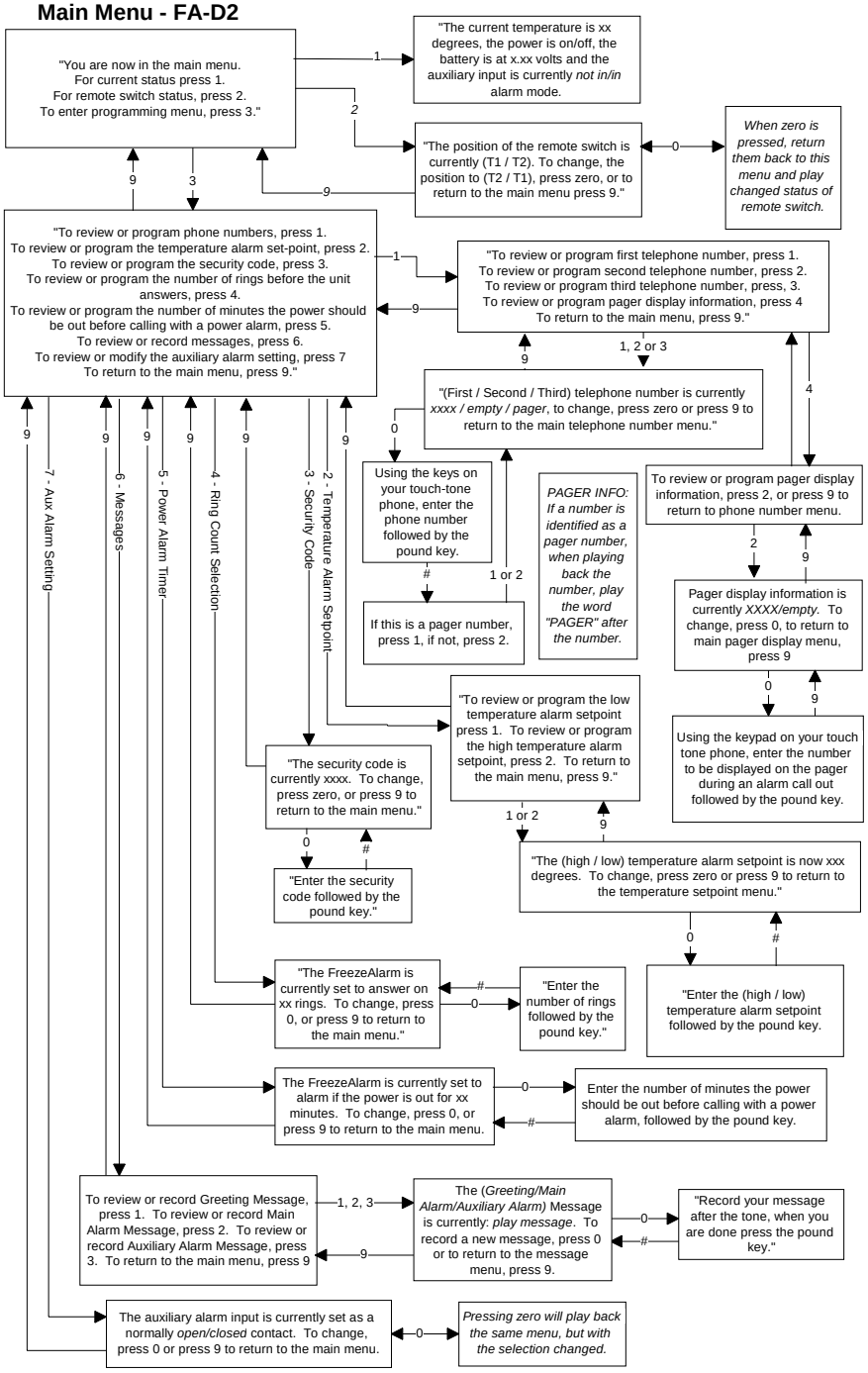
Users should ensure for their own protection that the electrical ground connections of the power utility telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

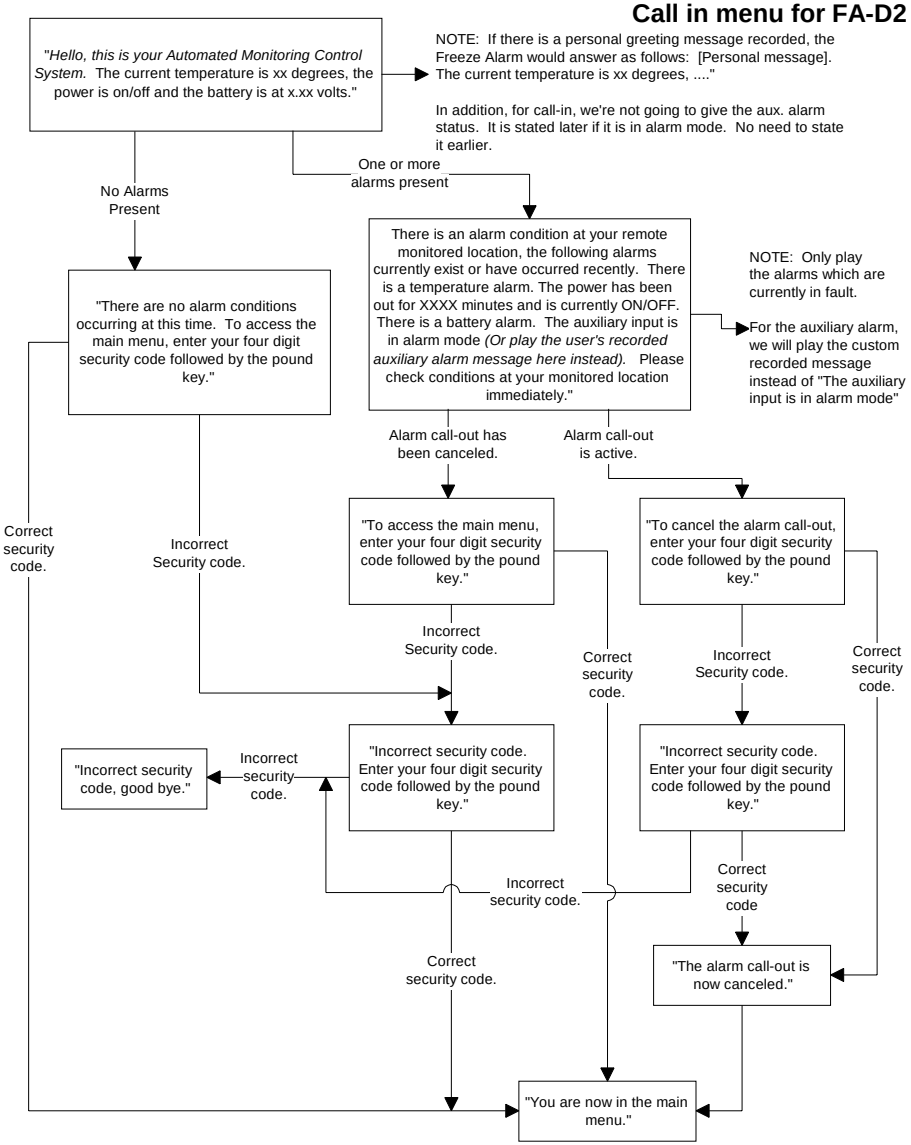
UL & CUL Listing:

The plug in transformer included with your FreezeAlarm is UL/CUL listed as a Class 2 Transformer. This is UL/CUL listed with Besler Electric under file number E84666.

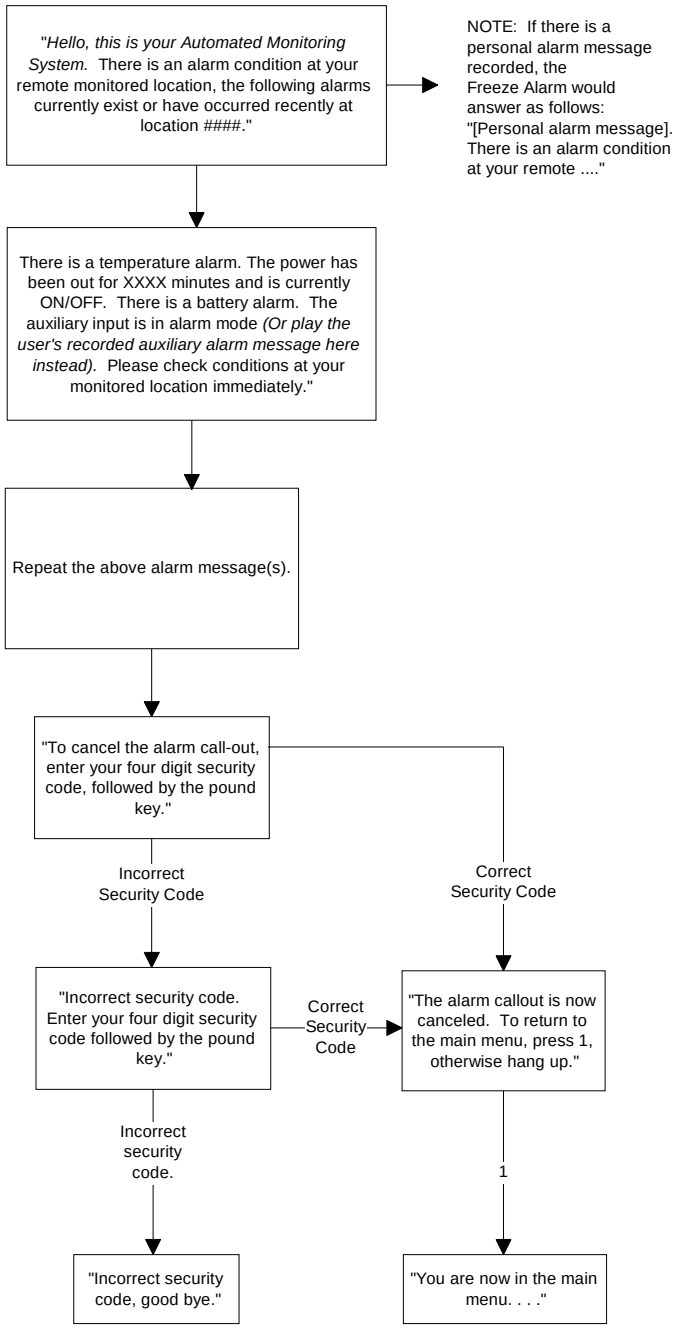
Main Menu - FA-D2



Call in menu for FA-D2

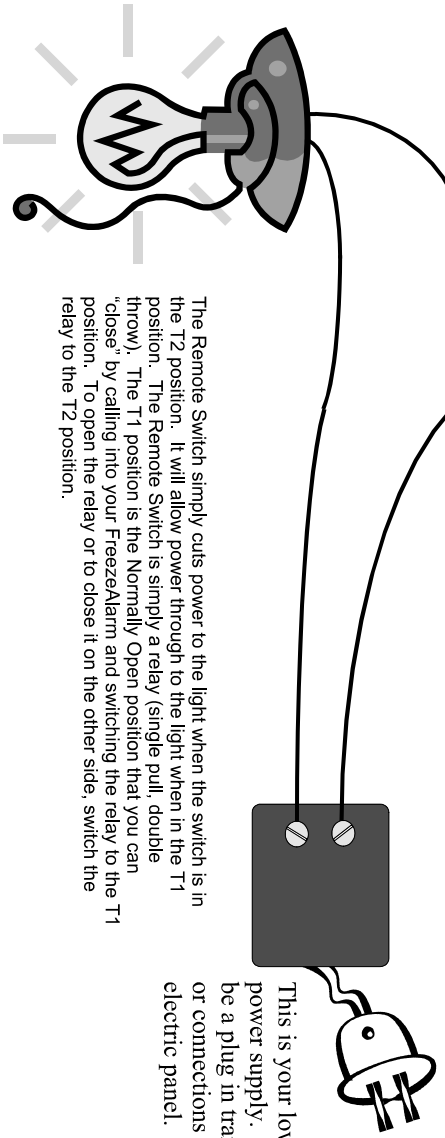


Call out menu FA-D2



Appendix B - Continued

Using the Remote Switch to remotely turn on or off another device.



Appendix B

Using the Remote Switch to Switch Between Two Thermostats set at Different Temperatures

PRE-HEAT DIAGRAM

This diagram shows a simple wiring diagram for a "single zone" heating system using LOW VOLTAGE or MILLIVOLT thermostats **ONLY!**

Please contact customer service or visit our web site for wiring diagrams detailing multi-zone and electric heating applications.

This is your furnace, boiler or heating system. The control panel on this device may also control your central air conditioner and thus allow you to cool down your home or turn on the air conditioning remotely.

The Remote Switch allows you to remotely switch between two thermostats set at different temperatures. This feature can be used easily to turn up the temperature or to turn on or down the Air Conditioning in a remote home or cabin.

A	B	C
Your heating system has an electronic panel that supplies low voltage power to your current thermostat on the wall. In step "A", we route this low voltage power to the COM terminal on the back of the FA-D2. This brings the low voltage power into a Single Pull, Double Throw (SPDT) relay contact.	From the relay contact on the FreezeAlarm you can direct this low voltage power to either your main thermostat (T1) or to a brand new thermostat (T2). T1 should be your "comfort" thermostat, set at a temperature you wish the premises to be when you arrive. T2 should be your "away" thermostat, set a temperature while you're away.	When you are not at the remote home, T2 will control the furnace and maintain the "away" temperature. When you want to visit that location, simply call up and route the power to T1. T1 will tell the furnace or air conditioner to start working to get to your "comfort" temperature.

⚠ The following diagrams are NOT installation schematics. These diagrams are intended to show you some possible ways to utilize the Deluxe FreezeAlarm's remote switch feature. Installation must be performed by trained personnel and in accordance with local codes, ordinances, regulations and instructions. If you do not feel comfortable doing this installation yourself, contact your local heating or electrical contractor. WARNING! Improper installation could result in hazardous conditions and damage to the FreezeAlarm unit, your property or person. Control Products is not liable or responsible for consequential damages to your person or property or installation costs of any nature. Please see the warranty statement that is provided in this instruction manual for full warranty and coverage limitations and exclusions.

CONTROL PRODUCTS